TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531

# OPERATING PERMIT (Conditional Major) Issued Pursuant to Tennessee Air Quality Act

**Date Issued:**

**Permit Number:**
453191

**Date Expires:** October 31, 2013

**Issued To:**
Diversified Scientific Services, Inc. (DSSI)

**Installation Address:**
657 Gallaher Road
Kingston

**Installation Description:**

Source 01: Mixed Waste and Propane-Fired RCRA Industrial Boiler; Spray Dryer/Quench, Fabric Filter, Scrubber, and HEPA Filter Controls;

Source 06: Raw Material Unloading, Storage, and Blending Operations with Activated Carbon Filter and HEPA Filter Controls

**Emission Source Reference No.**
73-0137

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

GENERAL CONDITION:

1. The application that was utilized in the preparation of this permit is dated July 19, 2000, and signed by Richard L. Devin, Engineering Manager for the permitted facility. If this person terminates employment or is reassigned different duties such that they are no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

**POST AT INSTALLATION ADDRESS**

SECTION I: General conditions. The following conditions shall apply to all sections of this permit unless otherwise noted.

2. The permittee has elected to opt-out of being issued a major source operating permit pursuant to Division Rule 1200-3-9-.02(11)(a). The permittee would be considered a major source because their "potential to emit" value for a single hazardous air pollutant (HAP) was greater than 10 tons per year, and for a combination of hazardous air pollutants (HAPs) was greater than 25 tons per year at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability thresholds for HAPs.

3. Any non-compliance with any condition(s) of this permit set to restrain the "potential to emit" below the applicability thresholds of 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations shall be reported in writing to the Technical Secretary within three (3) working days of such discovery. This notification, at a minimum, shall include the identification of the source, identification of the permit condition(s) violated, and details of the violation.

4. The following insignificant activities (**Table 1**) have been listed by the facility in the Conditional Major permit application per Rules 1200-3-9-.04(4) and 1200-3-9-.04(5). Additional insignificant activities may be added and operated at any time with the provision that prior written notification shall be submitted to the Technical Secretary. This permit may be updated to list additional insignificant sources, if necessary.

**Table 1**
**Exempt and Insignificant Activities**

| Description | Applicable Rule |
|---|---|
| Auxiliary boiler (propane-fired, 2.7 MMBtu/hr heat input) and ventilation heaters | 1200-3-9-.04(5)(f)(14) |
| Propane vaporizer, 0.3 MMBtu/hr | 1200-3-9-.04(4)(b) |
| Two diesel fuel storage tanks, 250 gallons each | 1200-3-9-.04(4)(d)(14) |
| Two alcohol/solvent storage tanks, 1,000 gallons each | 1200-3-9-.04(4)(d)(12) |
| Cooling tower | 1200-3-9-.04(5)(f)(15) |
| Non-contact process steam vents and air compressor condensate evaporator vents | 1200-3-9-.04(5)(f)(41) |
| Fire suppression water pump and backup electrical generator | 1200-3-9-.04(5)(f)(40) |
| Four room ventilators in boiler room | CO[illegible]-3-9-.04(4)(b) |
| Analytical laboratory exhausts | 1200-3-9-.04(5)(f)(19) |
| Boiler water treatment and filtration | 1200-3-9-.04(5)(f)(15) |
| Sodium hydroxide storage/recycle tank, 600 gallons | 1200-3-9-.04(5)(f)(80) |
| Scrubber water recycle tank, 300 gallons | 1200-3-9-.04(5)(f)(80) |
| Four liquid propane tanks, 1,000 gallons each | 1200-3-9-.04(4)(d)(12) |
| Nitrogen tank, 1,000 gallons | 1200-3-9-.04(4)(d)(12) |
| Sodium bicarbonate feeder bin | 1200-3-9-.04(4)(d)(12) |
| Empty can and empty container crushing operations | 1200-3-9-.04(5)(f)(95) |
| Gravel road and parking lot, fugitive emissions | 1200-3-9-.04(5)(f)(1) |
| Raw material storage area | 1200-3-9-.04(5)(f)(60) |
| Portable welding equipment | 1200-3-9-.04(5)(f)(21) |
| Portable kerosene heaters | 1200-3-9-.04(5)(f)(32) |
| Metal inspection/NDE equipment | 1200-3-9-.04(5)(f)(32) |

(conditions continued on next page)

5. The maximum emission rate from the entire facility for any single hazardous air pollutant (HAP), listed pursuant to Section 112(b) of the Federal Act, shall not exceed 9.9 tons per year. Total emissions of all HAPs from the entire facility shall not exceed 24.9 tons per year. In the event that the emission rates from the entire facility exceed these limits, the permittee shall provide written notification of the exceedance(s) to the Technical Secretary within fifteen (15) days from the date of discovery. This emission limitation is established pursuant to Rule 1200-3-9-.02(11)(a) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated May 26, 2000, from the permittee. The permittee has requested this limit in order to avoid Title V status.

6. The permittee shall calculate the actual quantities of HAPs emitted from this facility during each calendar month and maintain records of these emissions in a form that readily shows compliance with **Condition 5** of this permit (see Attachment A for example format – an alternative format that provides the same information shall be acceptable). These records must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years.

7. Volatile organic compound (VOC) and organic HAP emissions from this facility shall be determined according to the site-specific monitoring plan dated December 2004, or by approved revisions to this plan. Any revisions to this plan shall be submitted to the Technical Secretary for approval within 30 days of the revision date. Revisions to the monitoring plan shall be submitted to the following addressees.

Knoxville Environmental Assistance Center
Division of Air Pollution Control
2700 Middlebrook Pike
Knoxville, TN 37921

East Tennessee Permit Program
Division of Air Pollution Control
9th Floor, L& C Annex
401 Church Street
Nashville, TN 37243-1531

8. HAP emissions from insignificant activities at this facility have the potential to emit no more than 0.2 tons per year. In order to avoid the necessity of keeping emission records for these sources, 0.2 tons per year will be added to the facility-wide 12 consecutive month HAP emission total.

9. A report stating the compliance status of this facility with **Condition 5** shall be submitted by March 31 of every year, beginning in the year 2005. This report shall cover the preceding calendar year and shall include the records required by **Conditions 6, 21, 31 and 39** (a summary report of these records is acceptable if the summary provides sufficient information for the Technical Secretary to evaluate compliance). The report shall be submitted to the Knoxville Environmental Assistance Center at the following address:

Knoxville Environmental Assistance Center
Division of Air Pollution Control
2700 Middlebrook Pike
Knoxville, TN 37921

10. Visible emissions from this facility shall not exhibit greater than twenty percent (20%) opacity as determined by EPA Method 9, as published in 40 CFR 60, Appendix A (six-minute average). Consistent with the requirements of Chapters 1200-3-5 and 1200-3-20 of the Tennessee Air Pollution Control Regulations, due allowance shall be made for excess visible emissions that are necessary or unavoidable due to routine startup and shutdown conditions.

11. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control device(s). Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five (5) years.

12. Upon the malfunction/failure of any emission control device(s) serving this source, the operation of the process(es) served by the device(s) shall be regulated by Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.

13. The issuance of this permit supersedes any previously issued permit(s) for this air contaminant source.

14. The permittee is placed on notice that Boilers and Industrial Furnaces which combust hazardous waste are scheduled for regulation under Section 112 of the Clean Air Act for promulgation of Maximum Achievable Control Technology (MACT) standards. This permit will be revised as necessary to include applicable requirements from this rule.

(conditions continued on next page)

15. The issuance of this permit does not exempt the permittee from compliance with any conditions of the Resource Conservation and Recovery Act (RCRA) or any applicable regulations governing the emission of radionuclides.

16. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit's expiration date.

## SECTION II: SOURCE SPECIFIC CONDITIONS

**73-0137-01** Mixed Waste and Propane-Fired Industrial Boiler

17. Only natural gas, liquid propane gas, Numbers 1 through 5 fuel oil, ethanol, and diesel fuel shall be used as non-waste fuel(s) for this source. Hazardous and mixed waste used as fuel (including any solvents, surfactants, defoamers, or other appropriate fuel blending substances) shall conform to all requirements specified by the Division of Solid Waste Management and the Division of Radiological Health.

18. The sulfur content of the fuel(s) used by this source shall not exceed 0.5% percent by weight. Compliance with this requirement shall be assured as follows:

    a) Purchased natural gas or propane fuels combusted in the boiler system shall conform to 40 CFR 79.55 Base Fuel Specifications.

    b) For all fuels other than propane or natural gas, compliance shall be assured by on-site or independent laboratory analysis of each batch of fuel prior to combustion. Records of this analysis shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years.

19. Raw material feed rates to the boiler shall not exceed the limits shown in **Table 2**. These limits are established pursuant to the revised trial burn report dated October 2003, referencing emission tests conducted from March 20 - 27 2002 and April 2 - 3, 2002. These limits shall apply at all times, except as noted for specific pollutants during trial burns. Compliance with this condition shall be assured by compliance with the recordkeeping requirements of **Condition 21**.

**Table 2**
**Boiler Feed Rate Limits**

| Parameter | Maximum Feed Rate, 1996 CoC Limit (grams/hr) [1] | Maximum Feed Rate, Proposed RCRA Permit Limit (grams/hr) [2] |
|---|---|---|
| Waste Liquid | 623,900 | 515,471 |
| Antimony, Arsenic, Beryllium, Cadmium, Chlorine (total), Chromium, Cobalt, Fluorine (total), Lead, Manganese, Mercury, Nickel, Selenium | No feed rate limits will be established by the Division of Air Pollution Control for these pollutants. The permittee shall record the input rate of each pollutant and shall calculate the emissions for each pollutant as required by **Condition 6 and Condition 28**. | |

**Footnotes to Table 2**

1 1996 CoC (Certificate of Compliance) Limits are the interim RCRA limits established by the Division of Solid Waste Management for this boiler. The permittee shall comply with these limits from the date of permit issuance until the issuance of a RCRA operating permit by the Division of Solid Waste Management.

2 Proposed RCRA permit limits are established pursuant to the revised trial burn report dated October 2003, referencing emission tests conducted from March 20 - 27 2002 and April 2 - 3, 2002. Upon the issuance of a RCRA operating permit for the boiler, these limits shall supersede the 1996 CoC limits, and the permittee shall be required to comply with these limits. The permittee will not be required to comply with the 1996 CoC limits after the new RCRA limits become effective.

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20. Upon the issuance of a RCRA operating permit for the boiler, the permittee shall provide written notification of permit issuance to the Technical Secretary. This notification shall be postmarked no later than fourteen (14) days after the issue date of DSSI's RCRA operating permit and shall be submitted to the following addresses:

| | |
|---|---|
| Knoxville Environmental Assistance Center<br>Division of Air Pollution Control<br>2700 Middlebrook Pike<br>Knoxville, TN 37921 | East Tennessee Permit Program<br>Division of Air Pollution Control<br>9th Floor, L& C Annex<br>401 Church Street<br>Nashville, TN 37243-1531 |

21. An operating record of waste fuel composition and feed rate for each waste fuel processed within the boiler system must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

22. Particulate matter emitted from this source shall not exceed 0.2% of the waste liquid charging rate. This emission limitation is established pursuant to Rule 1200-3-6-.02(3)(a) of the Tennessee Air Pollution Control Regulations and the boiler input rate, as specified in **Condition 19** of this permit. Compliance with this condition shall be assured by compliance with the material input limit specified in **Condition 19**, with the operating parameter limits specified in **Condition 30**, and with the recordkeeping requirements specified in **Conditions 21 and 31**.

23. Hydrogen fluoride emitted from this source shall not exceed 0.66 lb/hr. This emission limitation shall apply at all times, except as noted during trial burn tests. Compliance with this condition shall be assured by compliance with the material input limit specified in **Condition 19**, with the operating parameter limits specified in **Condition 30**, and with the recordkeeping requirements specified in **Conditions 21 and 31**.

24. Hydrogen Chloride emitted from this source shall not exceed 0.66 lb/hr. This emission limitation shall apply at all times, except as noted during trial burn tests. Compliance with this condition shall be assured by compliance with the material input limit specified in **Condition 19**, with the operating parameter limits specified in **Condition 30**, and with the recordkeeping requirements specified in **Conditions 21 and 31**.

25. Beryllium emitted from this source shall not exceed 10 grams during any period of twenty-four (24) consecutive hours. This emission limitation is established pursuant to Rule 1200-3-11-.03(3)(a) of the Tennessee Air Pollution Control Regulations.

    Compliance with this condition shall be assured by complying with the beryllium feed rate limits established in **Conditions 19 and 34**, by compliance with the operating parameter limits established in **Condition 30**, and by compliance with the recordkeeping requirements of **Conditions 21 and 31**. Records of emissions test results, air sampling test results, and other data needed to determine compliance with the beryllium emissions limit of this condition must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This requirement is established pursuant to Rule 1200-3-11-.03(g).

26. Nitrogen oxides ($NO_X$) emitted from this source shall not exceed 10.2 lb/hr.

27. Sulfur Dioxide ($SO_2$) emitted from this source shall not exceed 1.37 lb/hr.

28. Emissions from this source of each HAP listed in **Table 3** shall be calculated as follows by using data from the most recent trial burn for $\eta_{Overall}$. The overall control efficiencies listed in **Table 3** are based on the trial burn conducted from March 20 - 27, 2002 and April 2 - 3, 2002. Emissions calculated by this method shall be added to the monthly total emissions calculated in **Condition 6**.

$$HAP_{Emission} = HAP_{Input} \times \left(1 - \eta_{Overall}\right)$$

    Where:

    - $HAP_{Emission}$ is the emission rate for each HAP.
    - $HAP_{Input}$ is the amount of each HAP input to the boiler, recorded as required by **Condition 19**.
    - $\eta_{Overall}$ is the overall control efficiency, listed in **Table 3**.

(conditions continued on next page)

**Table 3**
**Overall Control Efficiencies**

| Inorganic HAP | Control Efficiency (mass basis) [1] |
|---|---|
| Chlorine (total) | 99.81% |
| Fluorine (total) | 98.48% |
| Mercury | 93.49% |
| Selenium | 99.75% |
| Antimony, Arsenic, Cadmium, Lead | 99.96% |
| Beryllium, Chromium (total), Nickel, Cobalt, Manganese, | 99.97% [1] |

**Footnotes to Table 3**

1 The control efficiencies listed above are established pursuant to the revised trial burn report dated October 2003 and the Waste Fuel Boiler Test Report for $NO_X$, $SO_X$, and Fluoride Emissions dated January 2003. These reports reference emission tests conducted from March 20 - 27 2002 and April 2 - 3, 2002.

2 Trial burn data were not collected for cobalt or manganese. The control efficiency is based on the average value for metals in the same volatility grouping.

29. Emissions of total organic HAP from this source shall be calculated as specified in **Condition 7**. Emissions calculated by this method shall be added to the monthly total emissions calculated in **Condition 6**.

30. The permittee shall demonstrate compliance with the operating parameters shown in **Table 4** at all times when the boiler is combusting waste fuel. Compliance with this condition shall be assured by monitoring each parameter as shown in **Table 4** and by compliance with the recordkeeping requirements of **Condition 31**. These limits are established pursuant to the trial burn report dated August 8, 2003, referencing emission tests conducted from March 20 - 27, 2002 and April 2 - 3, 2002.

31. Records of the following information must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years.

    a) Combustion chamber temperature
    b) Boiler off-gas temperature at baghouse inlet
    c) Scrubber liquor pH
    d) Scrubber liquid to off-gas flow ratio
    e) Scrubber blowdown rate
    f) Pressure drop, HEPA filter 2nd bank

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**Table 4**
**Operating Parameter Limits**

| Parameter | Operating Limit (1996 CoC) [1] | Operating Limit (Proposed RCRA Permit Limit) [2] | Compliance Method |
|---|---|---|---|
| Thermal Input Rate | 16.36 MMBtu/hr | 14.81 MMBtu/hr | Continuously Monitored and Recorded |
| Minimum Combustion Chamber Temperature [3] | 2,054 °F | 2,054° F | Continuously Monitored and Recorded |
| Maximum Combustion Chamber Temperature | 2,466 °F | 2,466° F | Continuously Monitored and Recorded |
| Boiler Off-Gas, Maximum Temperature at Baghouse Inlet | 245° F | 250° F | Continuously Monitored and Recorded |
| Minimum Scrubber Liquor pH | 7.1 | 7.1 | Continuously Monitored and Recorded |
| Minimum Scrubber Blowdown Rate [4] | 0.40 gpm | 0.31 gpm | Continuously Monitored and Recorded |
| Minimum Scrubber Liquid to Off-Gas Flow Ratio [5] | 1.35 (gpm/acfm x 100) | 1.40 (gpm/acfm x 100) | Continuously Monitored and Recorded |
| Minimum Pressure Drop, HEPA Filter 2nd Bank | 0.26 inches $H_2O$ (gauge) | 0.26 inches $H_2O$ (gauge) | Continuously Monitored and Recorded |

**Footnotes to Table 4**

1 1996 CoC Limits are the interim RCRA limits established by the Division of Solid Waste Management for this boiler. The permittee shall comply with these limits from the date of permit issuance until the issuance of a RCRA operating permit by the Division of Solid Waste Management.

2 Proposed RCRA permit limits are established pursuant to the revised trial burn report dated October 2003, referencing emission tests conducted from March 20 – 27, 2002 and April 2 - 3, 2002. Upon the issuance of a RCRA operating permit for the boiler, these limits shall supersede the 1996 CoC limits, and the permittee shall be required to comply with these limits. The permittee will not be required to comply with the 1996 CoC limits after the new RCRA limits become effective.

3 °F = Degrees Fahrenheit
4 gpm = Gallons per minute
5 acfm = Actual cubic feet per minute

**73-0137-01** Mixed Waste and Propane-Fired Industrial Boiler
Source Specific Conditions for RCRA, TSCA, or Other Regulatory Trial Burns

32. **Conditions 33 through 39** shall apply to source 73-0137-01 during all trial burns conducted for compliance with RCRA, TSCA, or other regulatory requirements.

33. At least thirty (30) days prior to any trial burn, the Technical Secretary shall be given notice of the test to allow the opportunity to have an observer present.

34. During all trial burns, the maximum feed rates to the boiler shall not exceed the limits shown in **Table 5**. Compliance with this condition shall be assured by compliance with the recordkeeping requirements of **Condition 39**.

35. During all trial burns, the maximum heat input rate to the boiler shall not exceed 17.5 MMBtu/hr. Compliance with this condition shall be assured by compliance with the recordkeeping requirements of **Condition 39**.

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**Table 5**
**Boiler Feed Rate Limits During All Trial Burns**

| Parameter | Maximum Feed Rate (grams/hr) |
|---|---|
| Waste Liquid | 700,000 |
| Ash | 30,000 |

36. During all trial burns, the minimum burn zone combustion chamber temperature of the boiler shall not be less than 1,700 degrees Fahrenheit (° F). Compliance with this condition shall be assured by compliance with the recordkeeping requirements of **Condition 39**.

37. During all trial burns, the maximum operating time shall not exceed 720 hours during any period of twelve consecutive months. Compliance with this condition shall be assured by compliance with the recordkeeping requirements of **Condition 39**.

38. During all trial burns, pollutant emissions from the boiler shall not exceed the limits shown in **Table 6.**

**Table 6**
**Pollutant Emission Limits During all Trial Burns**

| Parameter | Emission Limit (lb/hr) |
|---|---|
| Particulate Matter (TSP) | 4.0 |
| Nitrogen oxides ($NO_X$) | 20.0 |
| Sulfur Dioxide ($SO_2$) | 1.5 |
| Gaseous Fluoride as $F_2$ | 0.50 |
| Hydrogen Fluoride (HF) | 0.66 |
| Chlorine as $Cl_2$ | 0.50 |
| Hydrogen Chloride (HCl) | 2.0 |

39. During all trial burns, an operating record of the heat input rate, combustion chamber temperature, material input rate, and operating hours, in a form which readily shows compliance with **Conditions 34, 35, 36, and 37**, must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This operating record must be retained for a period of not less than five (5) years.

**73-0137-06** Liquefaction Solids Grinder Vent; Raw Material Unloading, Storage, and Blending Operations with activated carbon filter control. RCRA Stabilization Treatment Unit Enclosure Exhaust with HEPA filter control. The VOC sources and RCRA Stabilization Unit are vented to a common duct with additional HEPA filter and activated carbon filter emission controls.

40. VOC emitted from this source, excluding organic HAP, shall not exceed 15.0 tons during any period of twelve consecutive months.

41. Emissions of organic HAP and of non-HAP VOC from this source shall be determined as specified in **Condition 7**. The permittee shall maintain records of VOC and organic HAP emissions from this source in a form that readily shows compliance with **Condition 40** of this permit (see Attachment A for example – an alternative format that provides the same information shall be acceptable). Organic HAP emissions from this source shall be added to the monthly total emissions calculated in **Condition 6.**

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42. The only non-exempt storage tanks authorized by this permit are listed in **Table 7**:

**Table 7**
**Non-Exempt Storage Tanks**

| Tank I. D. | Contents | Capacity (gallons) |
|---|---|---|
| 15-T-910 | Boiler Fuel (Blended Waste) | 7,014 |
| 15-T-920 | Boiler Fuel (Blended Waste) | 7,014 |
| 15-T-930 | Boiler Fuel (Blended Waste) | 8,665 |
| 15-T-940 | Boiler Fuel (Blended Waste) | 7,014 |
| 15-T-950 | Boiler Fuel (Blended Waste) | 7,014 |
| 38-T-601 | Boiler Fuel (Blended Waste) | 487 |
| 12-T-501 | Boiler Fuel (Blended Waste) | 565 |
| 12-T-502 | Boiler Fuel (Blended Waste) | 565 |
| 16-T-501 | Boiler Fuel (Blended Waste) | 565 |

(end of conditions)

## Attachment A: Sample Recordkeeping Format for HAP Emission Calculations

**Table A1: 73-0137-01 HAP Emissions Log for the Year 20_____**
**(Chlorine, Hydrogen Chloride, Total Fluoride, Total Organic HAP, Antimony through Cadmium)**

| | Emission Rate in Tons | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Month** | **Total Chloride as HCl** | **Total Fluoride as HF** | **Total Organic HAP** | **Antimony** | **Arsenic** | **Beryllium** | **Cadmium** | **Current Month Total Emissions (tons)** | **12-Month Total Emissions (tons) [3]** |
| January | | | | | | | | | |
| February | | | | | | | | | |
| March | | | | | | | | | |
| April | | | | | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | | | | | | | | | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | | | | | | | | | |
| December | | | | | | | | | |

The 12-Month Total Emission value is the sum of the HAP emissions in the current month plus the HAP emissions in the 11 preceding months. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for Tons per Month. For the second month the emissions will be equal to the sum of the first month and the second month. Indicate in parentheses the number of the months summed (i.e. 6 (2) represents 6 tons emitted in 2 months.) This log is the total amount of HAPs emitted to the air on a 12-month consecutive basis.

**Table A2: 73-0137-01 HAP Emissions Log for the Year 20____**

**(Chromium through Selenium)**

| Month | Emission Rate in Tons | | | | | | | Current Month Total Emissions (tons) | 12-Month Total Emissions (tons) |
|---|---|---|---|---|---|---|---|---|---|
| | Chromium | Cobalt | Lead | Manganese | Mercury | Nickel | Selenium | | |
| January | | | | | | | | | |
| February | | | | | | | | | |
| March | | | | | | | | | |
| April | | | | | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | | | | | | | | | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | | | | | | | | | |
| December | | | | | | | | | |

The 12-Month Total Emission value is the sum of the HAP emissions in the current month plus the HAP emissions in the 11 preceding months. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for Tons per Month. For the second month the emissions will be equal to the sum of the first month and the second month. Indicate in parentheses the number of the months summed (i.e. 6 (2) represents 6 tons emitted in 2 months.) This log is the total amount of HAPs emitted to the air on a 12-month consecutive basis.

**Table A3: 73-0137-06 VOC and HAP Emissions Log for the Year 20____**

| | Emission Rate in Tons | | | | | | | Total HAP Emissions | |
|---|---|---|---|---|---|---|---|---|---|
| **Month** | **Non-HAP VOC** | **HAP #1** | **HAP #2** | **HAP #3** | **HAP #4** | **HAP #5** | **HAP #n** | **Current Month Total Emissions (tons)** | **12-Month Total Emissions (tons)** |
| January | | | | | | | | | |
| February | | | | | | | | | |
| March | | | | | | | | | |
| April | | | | | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | | | | | | | | | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | | | | | | | | | |
| December | | | | | | | | | |

**Notes to Table A3:**

1. **The number and species of HAPs reported in Table A3 will depend upon the raw materials processed by this source. The number of HAPs reported each month may change, depending on the mixture of organics processed by this source.**
2. **If total organic HAP emissions from the** entire facility **are less than 10 tons/year, the permittee may report total organic HAP emissions rather than individual organic HAPs.**
3. **The 12-Month Total Emission value is the sum of the HAP emissions in the current month plus the HAP emissions in the 11 preceding months. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for Tons per Month. For the second month the emissions will be equal to the sum of the first month and the second month. Indicate in parentheses the number of the months summed (i.e. 6 (2) represents 6 tons emitted in 2 months.) This log is the total amount of HAPs emitted to the air on a 12-month consecutive basis.**

**Table A4: 73-0137 Facility-wide HAP Emissions Log for the Year 20____**

| Month | Current Month Total HAP Emission Rate in Tons | | | | | |
|---|---|---|---|---|---|---|
| | 73-0137-01 (Table A1) | 73-0137-01 (Table A2) | 73-0137-06 (Table A3) | Exempt and Insignificant Activities | Current Month Total Emissions (tons) | 12-Month Total Emissions (tons) |
| January | | | | 0.0167 | | |
| February | | | | 0.0167 | | |
| March | | | | 0.0167 | | |
| April | | | | 0.0167 | | |
| May | | | | 0.0167 | | |
| June | | | | 0.0167 | | |
| July | | | | 0.0167 | | |
| August | | | | 0.0167 | | |
| September | | | | 0.0167 | | |
| October | | | | 0.0167 | | |
| November | | | | 0.0167 | | |
| December | | | | 0.0167 | | |

The 12-Month Total Emission value is the sum of the HAP emissions in the current month plus the HAP emissions in the 11 preceding months. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for Tons per Month. For the second month the emissions will be equal to the sum of the first month and the second month. Indicate in parentheses the number of the months summed (i.e. 6 (2) represents 6 tons emitted in 2 months.) This log is the total amount of HAPs emitted to the air on a 12-month consecutive basis.

The total HAP emission rate from exempt and insignificant activities is equal to 0.2 tons/year. The monthly HAP emission rate is calculated as shown below:

$$\frac{(0.3 \text{ tons/year})}{(12 \text{ months/year})} = \textbf{0.0167 tons/month}$$